

10/665, 314

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTASEL1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 JUL 02 LMedLINE coverage updated
NEWS 3 JUL 02 SCISEARCH enhanced with complete author names
NEWS 4 JUL 02 CHEMCATS accession numbers revised
NEWS 5 JUL 02 CA/CAPLUS enhanced with utility model patents from China
NEWS 6 JUL 16 CAPLUS enhanced with French and German abstracts
NEWS 7 JUL 18 CA/CAPLUS patent coverage enhanced
NEWS 8 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 9 JUL 30 USGENE now available on STN
NEWS 10 AUG 06 CAS REGISTRY enhanced with new experimental property tags
NEWS 11 AUG 06 BEILSTEIN updated with new compounds
NEWS 12 AUG 06 FSTA enhanced with new thesaurus edition
NEWS 13 AUG 13 CA/CAPLUS enhanced with additional kind codes for granted patents
NEWS 14 AUG 20 CA/CAPLUS enhanced with CAS indexing in pre-1907 records
NEWS 15 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 16 AUG 27 USPATOLD now available on STN
NEWS 17 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data
NEWS 18 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS 19 SEP 13 FORIS renamed to SOFIS
NEWS 20 SEP 13 INPADOCDB enhanced with monthly SDI frequency
NEWS 21 SEP 17 CA/CAPLUS enhanced with printed CA page images from 1967-1998
NEWS 22 SEP 17 CAPLUS coverage extended to include traditional medicine patents
NEWS 23 SEP 24 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 24 OCT 02 CA/CAPLUS enhanced with pre-1907 records from Chemisches Zentralblatt

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 12:55:29 ON 05 OCT 2007

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 12:55:41 ON 05 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4

DICTIONARY FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

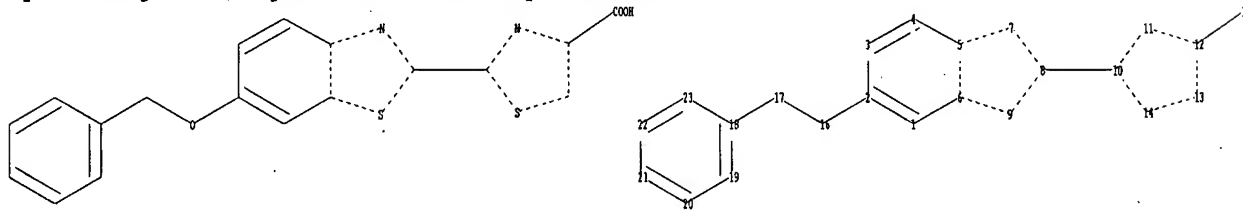
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\11665314s.str



chain nodes :

15 16 17

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 18 19 20 21 22 23

chain bonds :

2-16 8-10 12-15 16-17 17-18

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13 13-14
18-19 18-23 19-20 20-21 21-22 22-23

exact/norm bonds :

1-2 1-6 2-3 2-16 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13
13-14 16-17

exact bonds :

8-10 12-15 17-18

normalized bonds :

18-19 18-23 19-20 20-21 21-22 22-23

Match level :

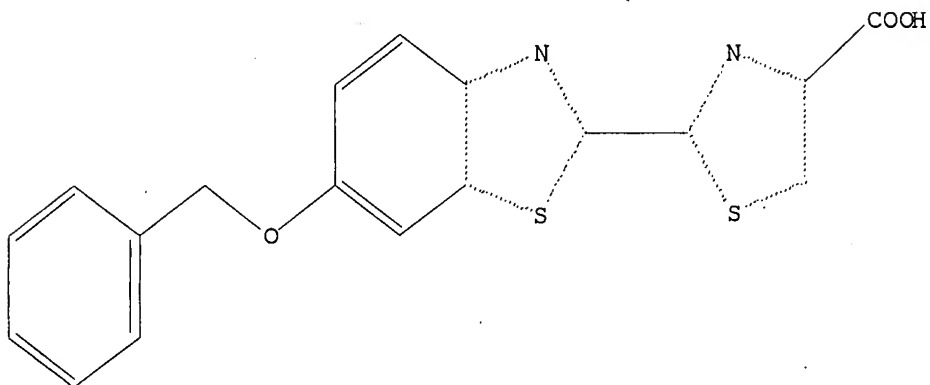
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS 18:Atom 19:Atom
20:Atom 21:Atom 22:Atom 23:Atom

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 12:55:59 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 189 TO ITERATE

100.0% PROCESSED 189 ITERATIONS
SEARCH TIME: 00.00.01

1 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 2956 TO 4604

PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 12:56:04 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 4492 TO ITERATE

100.0% PROCESSED 4492 ITERATIONS
SEARCH TIME: 00.00.01

11 ANSWERS

L3 11 SEA SSS FUL L1

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
172.10	172.31

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 12:56:06 ON 05 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Oct 2007 VOL 147 ISS 16
FILE LAST UPDATED: 4 Oct 2007 (20071004/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l3

L4 2 L3

=> d ibib abs hitstr tot

ACCESSION NUMBER: 2006:1279865 CAPLUS

DOCUMENT NUMBER: 146:57589

TITLE: Luminogenic and fluorogenic compounds and methods to detect molecules or conditions
 INVENTOR(S): Dally, William; Hawkins, Erika; Klaubert, Dieter; Liu, Jianquan; Meisenheimer, Poncho; Scuria, Michael; Shultz, John W.; Unch, James; Wood, Keith V.; Zhou, Wenhui; Valley, Michael P.; Cali, James J.
 PATENT ASSIGNEE(S): Promega Corporation, USA
 SOURCE: PCT Int. Appl., 328pp.
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006130551	A2	20061207	WO 2006-US20731	20060530
WO 2006130551	A8	20070201		
WO 2006130551	A3	20070503		
V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, SF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
US 2007015790	A1	20070118	US 2006-444145	20060531
PRIORITY APPLN. INFO.:		US 2005-685957P	P	20050531
		US 2005-693034P	P	20050621
		US 2005-692925P	P	20050622
		US 2006-790455P	P	20060407

OTHER SOURCE(S): MARPAT 146:57589

AB A method to detect the presence or amount of at least one mol. in a sample which employs a derivative of luciferin or a derivative of a fluorophore is provided.

IT 916661-52-4 916661-53-5 916661-59-1

916661-63-7

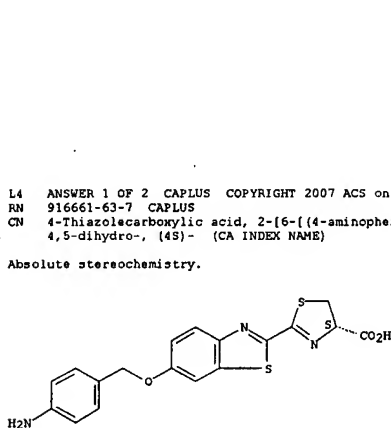
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(luminogenic and fluorogenic compds. and methods to detect mols. or conditions)

RN 916661-52-4 CAPLUS

CN 4-Thiazolecarboxylic acid, 2-[6-[(2,3,4,5,6-pentafluorophenyl)methoxy]-2-benzothiazolyl]-, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



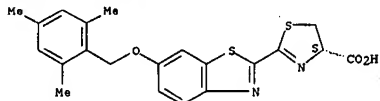
IT 916660-57-6P 916661-30-8P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

RN 916660-57-6 CAPLUS

CN 4-Thiazolecarboxylic acid, 4,5-dihydro-2-[6-[(2,4,6-trimethylphenyl)methoxy]-2-benzothiazolyl]-, (4S)- (CA INDEX NAME)

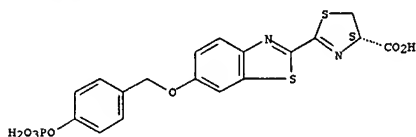
Absolute stereochemistry.



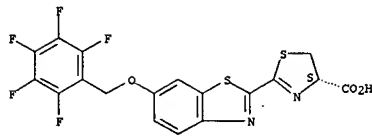
RN 916661-30-8 CAPLUS

CN 4-Thiazolecarboxylic acid, 4,5-dihydro-2-[6-[(4-phosphonophenyl)methoxy]-2-benzothiazolyl]-, ammonium salt (1:?), (4S)- (CA INDEX NAME)

Absolute stereochemistry.



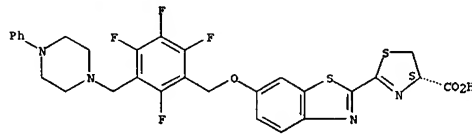
● x NH3



RN 916661-53-5 CAPLUS

CN 4-Thiazolecarboxylic acid, 4,5-dihydro-2-[6-[(2,3,4,6-tetrafluoro-5-[(4-phenyl-1-piperazinyl)methyl]phenyl)methoxy]-2-benzothiazolyl]-, (4S)- (CA INDEX NAME)

Absolute stereochemistry.

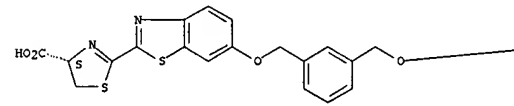


RN 916661-59-1 CAPLUS

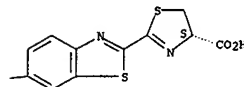
CN 4-Thiazolecarboxylic acid, 2,2'-[1,3-phenylenebis(methyleneoxy-6,2-benzothiazol-2-yl)]bis(4,5-dihydro-, (4S,4'S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



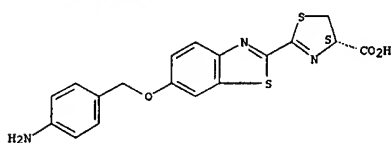
PAGE 1-B



RN 916661-63-7 CAPLUS

CN 4-Thiazolecarboxylic acid, 2-[6-[(4-aminophenyl)methoxy]-2-benzothiazolyl]-, 4,5-dihydro-, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



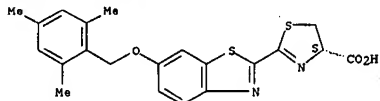
IT 916660-57-6P 916661-30-8P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

RN 916660-57-6 CAPLUS

CN 4-Thiazolecarboxylic acid, 4,5-dihydro-2-[6-[(2,4,6-trimethylphenyl)methoxy]-2-benzothiazolyl]-, (4S)- (CA INDEX NAME)

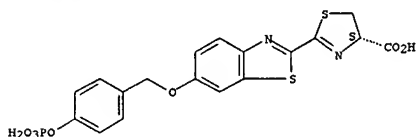
Absolute stereochemistry.



RN 916661-30-8 CAPLUS

CN 4-Thiazolecarboxylic acid, 4,5-dihydro-2-[6-[(4-phosphonophenyl)methoxy]-2-benzothiazolyl]-, ammonium salt (1:?), (4S)- (CA INDEX NAME)

Absolute stereochemistry.



IT 916660-53-2P 916660-55-4P

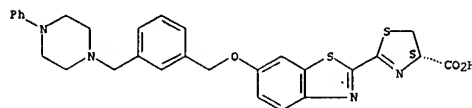
RL: SPN (Synthetic preparation); PREP (Preparation)

(luminogenic and fluorogenic compds. and methods to detect mols. or conditions)

RN 916660-53-2 CAPLUS

CN 4-Thiazolecarboxylic acid, 4,5-dihydro-2-[6-[(3-[(4-phenyl-1-piperazinyl)methyl]phenyl)methoxy]-2-benzothiazolyl]-, (4S)- (CA INDEX NAME)

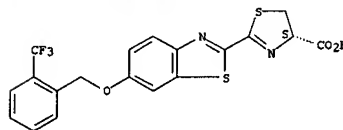
Absolute stereochemistry.



RN 916660-55-4 CAPLUS

CN 4-Thiazolecarboxylic acid, 4,5-dihydro-2-[6-[(2-(trifluoromethyl)phenyl)methoxy]-2-benzothiazolyl]-, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

DOCUMENT NUMBER:

TITLE:

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004027378	A2	20040401	WO 2003-US29078	20030916
WO 2004027378	A3	20041125		
V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2497560	A1	20040401	CA 2003-2497560	20030916
AU 2003267245	A1	20040408	AU 2003-267245	20030916
AU 2003267245	B2	20070712		
EP 1546162	A2	20050629	EP 2003-749715	20030916
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006509339	T	20060309	JP 2004-537859	20030916
US 200411099	A1	20040902	US 2003-066534	20030919
PRIORITY APPL. INFO.: US 2002-112254 P 20020920				
US 2003-483309 P 20030627				
WO 2003-US29078 W 20030916				

OTHER SOURCE(S):

MARPAT 140:299425

AB The present invention provides methods, compns., substrates, and kits useful for analyzing the metabolic activity in cells, tissue, and animals and for screening test compds. for their effect on cytochrome P 450 activity. In particular, a one-step and two-step methods using luminogenic mol.s., e.g. luciferin or coelenterazines, that are cytochrome P 450 substrates and that are also bioluminescent enzyme, e.g., luciferase, pro-substrates are provided. Upon addition of the luciferin derivative or other luminogenic mol. into a P 450 reaction, the P 450 enzyme metabolizes the mol. into a bioluminescent enzyme substrate, e.g., luciferin and/or luciferin derivative metabolite, in a P 450 reaction. The resulting metabolite(s) serves as a substrate of the bioluminescent enzyme, e.g., luciferase, in a second light-generating reaction. Luminescent cytochrome P 450 assays with low background signals and high sensitivity are disclosed and isoform selectivity is demonstrated. The present invention also provides an improved method for performing luciferase reactions which employs added pyrophosphatase to remove inorg. pyrophosphate, a luciferase inhibitor which may be present in the reaction mixture as a contaminant or may be generated during the reaction. The

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

present method further provides a method for stabilizing and prolonging the luminescent signal in a luciferase-based assay using luciferase stabilizing agents such as reversible luciferase inhibitors.

IT 676460-32-5P 676460-33-6P

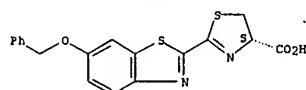
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(luminescent cytochrome P 450 assay using luciferase, luciferin derivs. and pyrophosphatase, and drug screening applications)

RN 676460-32-5 CAPLUS

CN 4-Thiazolecarboxylic acid, 4,5-dihydro-2-[6-(phenylmethoxy)-2-benzothiazolyl]-, (4S)- (CA INDEX NAME)

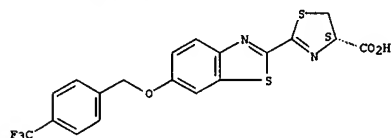
Absolute stereochemistry.



RN 676460-33-6 CAPLUS

CN 4-Thiazolecarboxylic acid, 4,5-dihydro-2-[4-(trifluoromethyl)phenylmethoxy]-2-benzothiazolyl]-, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



=> fil reg

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
11.01	183.32

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-1.56	-1.56

CA SUBSCRIBER PRICE

FILE 'REGISTRY' ENTERED AT 12:56:18 ON 05 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4

DICTIONARY FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

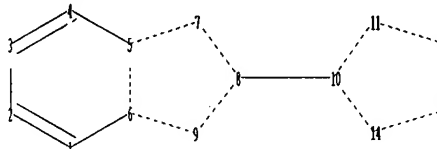
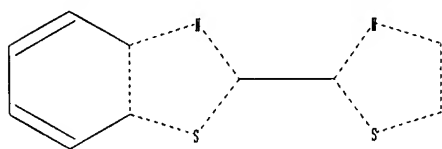
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10665314.str



ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14

chain bonds :

8-10

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13 13-14

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13 13-14

exact bonds :

8-10

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

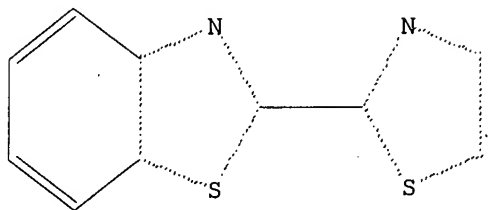
11:Atom 12:Atom 13:Atom 14:Atom

L5 STRUCTURE UPLOADED

=> d

L5 HAS NO ANSWERS

L5 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 15

SAMPLE SEARCH INITIATED 12:57:01 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 46 TO ITERATE

100.0% PROCESSED 46 ITERATIONS

37 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 514 TO 1326

PROJECTED ANSWERS: 376 TO 1104

L6 37 SEA SSS SAM L5

=> s 15 full

FULL SEARCH INITIATED 12:57:05 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 818 TO ITERATE

100.0% PROCESSED 818 ITERATIONS

600 ANSWERS

SEARCH TIME: 00.00.01

L7 600 SEA SSS FUL L5

=> .fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

172.10

355.42

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-1.56

FILE 'CAPLUS' ENTERED AT 12:57:07 ON 05 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Oct 2007 VOL 147 ISS 16
FILE LAST UPDATED: 4 Oct 2007 (20071004/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s 17
L8 1155 L7

=> FIL REG		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	2.35	357.77
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-1.56

FILE 'REGISTRY' ENTERED AT 13:00:21 ON 05 OCT 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4
DICTIONARY FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

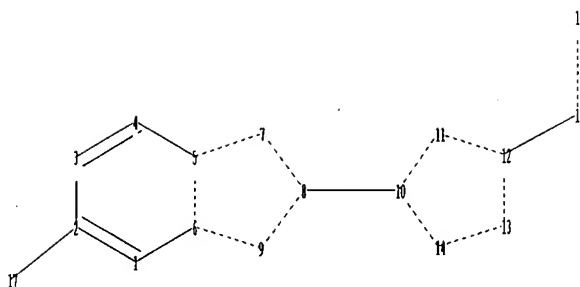
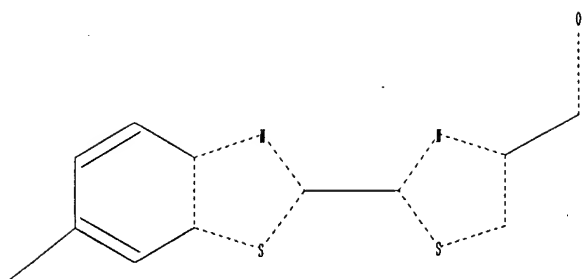
TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>
Uploading C:\Program Files\Stnexp\Queries\10665314b.str



chain nodes :

15 16 17

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14

chain bonds :

2-17 8-10 12-15 15-16

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13 13-14

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13 13-14
15-16

exact bonds :

2-17 8-10 12-15

Match level :

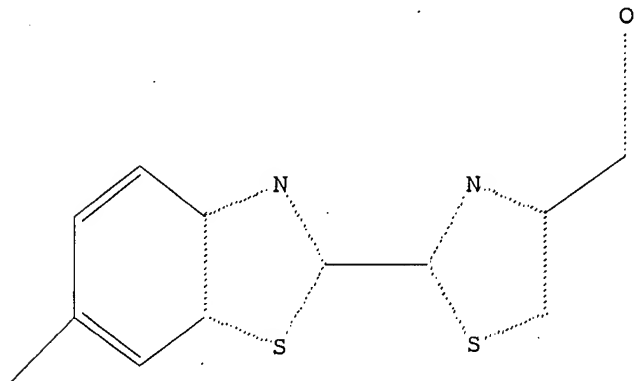
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS

L9 STRUCTURE UPLOADED

=> d

L9 HAS NO ANSWERS

L9 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 19

SAMPLE SEARCH INITIATED 13:00:40 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 3 TO ITERATE

100.0% PROCESSED 3 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 3 TO 163
PROJECTED ANSWERS: 0 TO 0

L10 0 SEA SSS SAM L9

=> s 19 full

FULL SEARCH INITIATED 13:00:43 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 58 TO ITERATE

100.0% PROCESSED 58 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

L11 2 SEA SSS FUL L9

=> fil caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	172.10	529.87
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.56

FILE 'CAPLUS' ENTERED AT 13:00:45 ON 05 OCT 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Oct 2007 VOL 147 ISS 16
FILE LAST UPDATED: 4 Oct 2007 (20071004/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s 111

L12 1 L11

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.47	530.34

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-1.56

CA SUBSCRIBER PRICE

FILE 'REGISTRY' ENTERED AT 13:01:11 ON 05 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4

DICTIONARY FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

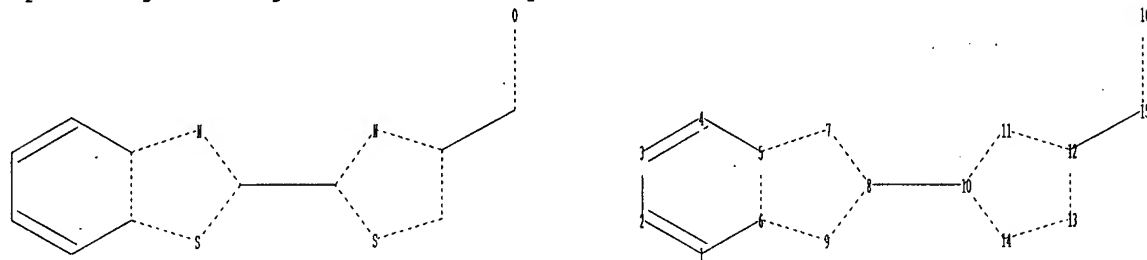
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10665314c.str



chain nodes :

15 16

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14

chain bonds :

8-10 12-15 15-16

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13 13-14

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13 13-14
15-16
exact bonds :
8-10 12-15

Match level :

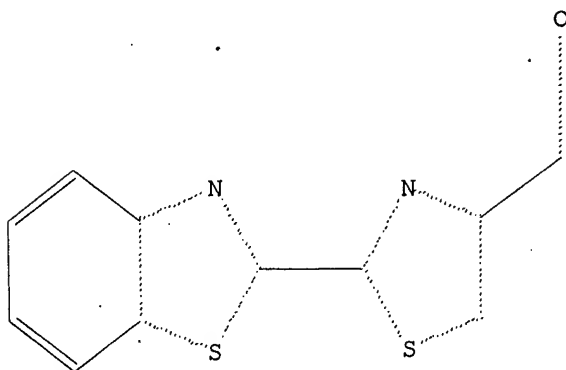
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS

L13 STRUCTURE UPLOADED

=> d

L13 HAS NO ANSWERS

L13 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l13

SAMPLE SEARCH INITIATED 13:01:40 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 23 TO ITERATE

100.0% PROCESSED 23 ITERATIONS

21 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 173 TO 747

PROJECTED ANSWERS: 146 TO 694

L14 21 SEA SSS SAM L13

=> s l13 full

FULL SEARCH INITIATED 13:01:43 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 388 TO ITERATE

100.0% PROCESSED 388 ITERATIONS

320 ANSWERS

SEARCH TIME: 00.00.01

L15 320 SEA SSS FUL L13

=> fil caplus
COST IN U.S. DOLLARS
FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
172.10	702.44

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-1.56

CA SUBSCRIBER PRICE

FILE 'CAPLUS' ENTERED AT 13:01:45 ON 05 OCT 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Oct 2007 VOL 147 ISS 16
FILE LAST UPDATED: 4 Oct 2007 (20071004/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l15
L16 920 L15

=> fil reg
COST IN U.S. DOLLARS
FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
0.47	702.91

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-1.56

CA SUBSCRIBER PRICE

FILE 'REGISTRY' ENTERED AT 13:02:30 ON 05 OCT 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4
DICTIONARY FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

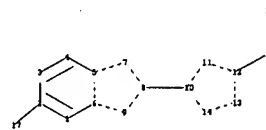
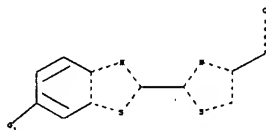
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10665314d.str



chain nodes :

15 16 17

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14

chain bonds :

2-17 8-10 12-15 15-16

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13 13-14

exact/norm bonds :

1-2 1-6 2-3 2-17 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13

13-14 15-16

exact bonds :

8-10 12-15

G1:Cb,Cy,Hy,Ak

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

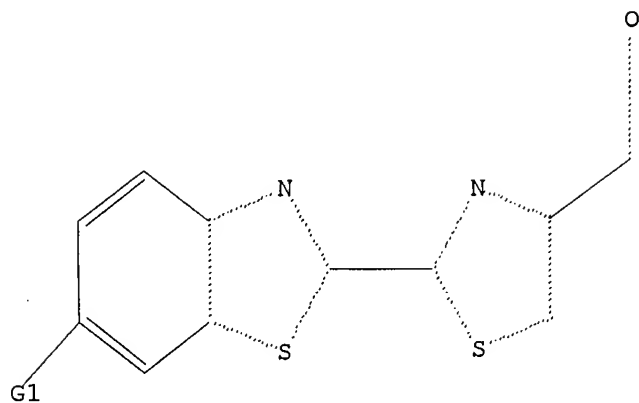
11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS

L17 STRUCTURE UPLOADED

=> d

L17 HAS NO ANSWERS

L17 STR



G1 Cb,Cy,Hy,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s l17

SAMPLE SEARCH INITIATED 13:02:49 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 23 TO ITERATE

100.0% PROCESSED 23 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 173 TO 747

PROJECTED ANSWERS: 0 TO 0

L18 0 SEA SSS SAM L17

=> s l17 full

FULL SEARCH INITIATED 13:02:52 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 388 TO ITERATE

100.0% PROCESSED 388 ITERATIONS

4 ANSWERS

SEARCH TIME: 00.00.01

L19 4 SEA SSS FUL L17

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

172.10

875.01

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-1.56

FILE 'CAPLUS' ENTERED AT 13:02:54 ON 05 OCT 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Oct 2007 VOL 147 ISS 16
FILE LAST UPDATED: 4 Oct 2007 (20071004/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l19

L20 3 L19

=> d ibib abs hitstr tot

L20 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:722833 CAPLUS
DOCUMENT NUMBER: 141:217983
TITLE: Signalling compounds for use in methods of detecting hydrogen peroxide
INVENTOR(S): Akhavan-Tafti, Hashem; Eickholt, Robert A.; Lauwers, Kenneth S.; Handley, Richard S.
PATENT ASSIGNEE(S): Lumigen, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 33 pp., Cont.-in-part of U.S. Ser. No. 371,053.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004171098	A1	20040902	US 2003-600928	20030620
US 6919463	B2	20050719		
US 2004166539	A1	20040826	US 2003-371053	20030220
WO 2004074810	A2	20040902	WO 2004-US2020	20040217
WO 2004074810	A3	20050825		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NG, NO, NZ, OM, PA, PE, PG, PH, PK, PL, PT, RO, RU, SD, SE, SI, SK, SL, SM, SN, SV, TC, TD, TG, TM, TN, TR, TT, TZ, UG, UZ, VC, VE, VU, WO, ZA, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, GU, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1594855	A2	20051116	EP 2004-711799	20040217
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006520465	T	20060907	JP 2006-502994	20040217
PRIORITY APPLN. INFO.:			US 2003-371053	A2 20030220
			US 2003-600928	A 20030620
			WO 2004-US2020	W 20040217

OTHER SOURCE(S): MARPAT 141:217988
AB Comps. useful for detecting a source of hydrogen peroxide are disclosed wherein a signalling compound of the formula: Sig-B-(OR5)(OR6) is reacted with peroxide. Sig is an aromatic or heteroarom. ring group, B is a boron atom, and R5 and R6 are independently selected from hydrogen and lower alkyl groups and can be joined together as a straight or branched alkylene chain forming a five or six-membered ring. A detectable product compound Sig-OH is produced and detected by measuring color, fluorescence, chemiluminescence, or bioluminescence. The signalling compound itself does not possess the detectable property or does so only to a very weak degree. The comps. can be used for detection in assays for peroxide or peroxide-producing enzymes and in assays employing enzyme-labeled specific binding pairs.
IT 741253-14-5P 741253-17-8P
RL: ARG (Analytical reagent use); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses) (methods and comps. for detection of hydrogen peroxide)
RN 741253-14-5 CAPLUS
CN 4-Thiazolecarboxylic acid, 4,5-dihydro-5,5-dimethyl-2-[6-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-2-benzothiazolyl]- (CA INDEX NAME)

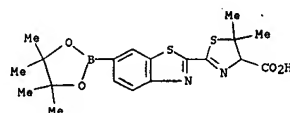
L20 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:701711 CAPLUS
DOCUMENT NUMBER: 141:217987
TITLE: Signalling compounds and methods for detecting hydrogen peroxide
INVENTOR(S): Akhavan-Tafti, Hashem; Eickholt, Robert A.; Lauwers, Kenneth S.; Handley, Richard S.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 32 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

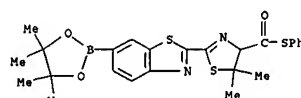
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004166539	A1	20040826	US 2003-371053	20030220
US 2004171098	A1	20040902	US 2003-600928	20030620
US 6919463	B2	20050719		
WO 2004074810	A2	20040902	WO 2004-US2020	20040217
WO 2004074810	A3	20050825		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NG, NO, NZ, OM, PA, PE, PG, PH, PK, PL, PT, RO, RU, SD, SE, SI, SK, SL, SM, SN, SV, TC, TD, TG, TM, TN, TR, TT, TZ, UG, UZ, VC, VE, VU, WO, ZA, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, GU, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1594855	A2	20051116	EP 2004-711799	20040217
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006520465	T	20060907	JP 2006-502994	20040217
PRIORITY APPLN. INFO.:			US 2003-371053	A2 20030220
			US 2003-600928	A 20030620
			WO 2004-US2020	W 20040217

OTHER SOURCE(S): MARPAT 141:217987
AB Methods and compound useful for detecting a source of hydrogen peroxide are disclosed wherein a signalling compound of the formula: Sig-B-(OR)2 is reacted with peroxide. Sig is a non-polymeric organic group, B is a boron atom, and each R is independently selected from hydrogen, alkyl and aryl groups and can be joined together as a straight or branched alkylene chain forming a ring or as an aromatic ring. A detectable product compound Sig-OH or Sig-O- is produced and detected by measuring color, absorbance, fluorescence, chemiluminescence, or bioluminescence. The signalling compound itself does not possess the detectable property or does so only to a very weak degree. The methods can be used as a detectable signal in assays for peroxide or peroxide-producing enzymes and in assays employing enzyme-labeled specific binding pairs.
IT 741253-14-5P 741253-17-8P
RL: ARG (Analytical reagent use); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses) (methods and comps. for detection of hydrogen peroxide)
RN 741253-14-5 CAPLUS
CN 4-Thiazolecarboxylic acid, 4,5-dihydro-5,5-dimethyl-2-[6-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-2-benzothiazolyl]- (CA INDEX NAME)

L20 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

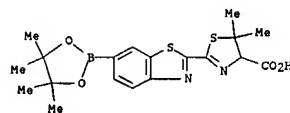


RN 741253-17-8 CAPLUS
CN 4-Thiazolecarboxylic acid, 4,5-dihydro-5,5-dimethyl-2-[6-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-2-benzothiazolyl]-, S-phenyl ester (CA INDEX NAME)

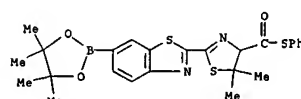


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 741253-17-8 CAPLUS
CN 4-Thiazolecarboxylic acid, 4,5-dihydro-5,5-dimethyl-2-[6-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-2-benzothiazolyl]-, S-phenyl ester (CA INDEX NAME)



ACCESSION NUMBER:

1970:18740 CAPLUS

DOCUMENT NUMBER:

72:18740

TITLE:

Substrate-binding properties of firefly luciferase.

AUTHOR(S):

I. Luciferin-binding site

CORPORATE SOURCE:

Denburg, Jeffrey; Lee, Reiko Takasaka; McElroy, W. D.

SOURCE:

Johns Hopkins Univ., Baltimore, MD, USA

Archives of Biochemistry and Biophysics (1969),

134(2), 381-94

CODEN: ABBIA4; ISSN: 0003-9861

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Various techniques were used for characterization of the luciferin-binding site of the firefly luciferase. Both equilibrium-dialysis and fluorescence-titration techniques revealed the existence of 2 identical, noninteracting binding sites for dehydroluciferin, which is a potent competitive inhibitor. Kinetically obtained dissociation constants of various luciferin analogs and other competitive inhibitors revealed that most of the binding energies of these compounds reside in the backbone ring structure and that various substituents did not influence the binding to any significant extent. Exceptions to this are the Me group at the 6-position of the benzothiazole ring and the carboxylic acid group. The binding energy of the luciferin backbone structure to the luciferin-binding site is 7.5 kcal/mole. Two parts of the luciferin molecule, the benzothiazole ring portion and the thiazoline ring portion, contribute 6.0 kcal/mole and 1.5 kcal/mole, respectively, to the binding energy. Comparison of the binding energies of several heterocyclic compounds structurally related to benzothiazole suggests that the N atom of the benzothiazole ring may be important in orienting the compound to a fixed position in the luciferin-binding site. The binding studies with N-ethylmaleimide-inactivated luciferase gave further evidence that the 2 SH groups essential for the luciferase activity are located at the luciferin binding sites, most likely 1 at each binding site. Excitation spectra of luciferase-bound dehydroluciferin indicated that the phenolic group of dehydroluciferin is in unionized form on the enzyme even in a medium of high pH. This effect and a large enhancement of the blue fluorescence peak at 440 mμ suggest the environment of luciferin-binding site to be quite hydrophobic, in agreement with earlier observations.

IT

23815-78-3

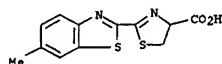
RL: PROC (Process)

(luciferase binding of)

RN 23815-78-3 CAPLUS

CN 2-Thiazoline-4-carboxylic acid, 2-(6-methyl-2-benzothiazolyl)- (8CI) (CA

INDEX NAME)



=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

16.28

891.29

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-2.34

-3.90

STN INTERNATIONAL LOGOFF AT 13:03:21 ON 05 OCT 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTASEL1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	JUL 02	LMEDLINE coverage updated
NEWS	3	JUL 02	SCISEARCH enhanced with complete author names
NEWS	4	JUL 02	CHEMCATS accession numbers revised
NEWS	5	JUL 02	CA/CAPplus enhanced with utility model patents from China
NEWS	6	JUL 16	CAPplus enhanced with French and German abstracts
NEWS	7	JUL 18	CA/CAPplus patent coverage enhanced
NEWS	8	JUL 26	USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS	9	JUL 30	USGENE now available on STN
NEWS	10	AUG 06	CAS REGISTRY enhanced with new experimental property tags
NEWS	11	AUG 06	BEILSTEIN updated with new compounds
NEWS	12	AUG 06	FSTA enhanced with new thesaurus edition
NEWS	13	AUG 13	CA/CAPplus enhanced with additional kind codes for granted patents
NEWS	14	AUG 20	CA/CAPplus enhanced with CAS indexing in pre-1907 records
NEWS	15	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS	16	AUG 27	USPATOLD now available on STN
NEWS	17	AUG 28	CAS REGISTRY enhanced with additional experimental spectral property data
NEWS	18	SEP 07	STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS	19	SEP 13	FORIS renamed to SOFIS
NEWS	20	SEP 13	INPADOCDB enhanced with monthly SDI frequency
NEWS	21	SEP 17	CA/CAPplus enhanced with printed CA page images from 1967-1998
NEWS	22	SEP 17	CAPplus coverage extended to include traditional medicine patents
NEWS	23	SEP 24	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	24	OCT 02	CA/CAPplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS EXPRESS	19	SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.	
NEWS HOURS	STN Operating Hours Plus Help Desk Availability		
NEWS LOGIN	Welcome Banner and News Items		
NEWS IPC8	For general information regarding STN implementation of IPC 8		

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 14:21:09 ON 05 OCT 2007

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 14:21:18 ON 05 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4

DICTIONARY FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

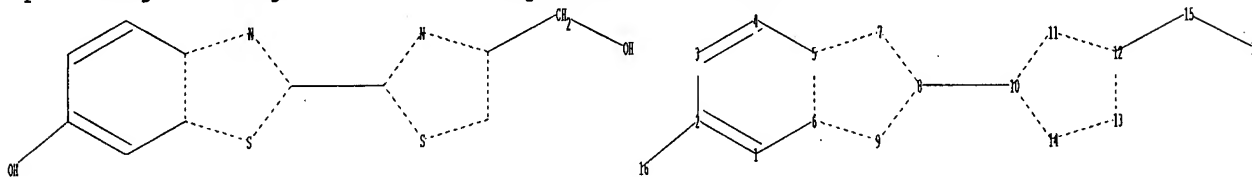
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10665314e.str



chain nodes :

15 16 18

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14

chain bonds :

2-16 8-10 12-15 15-18

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13 13-14

exact/norm bonds :

1-2 1-6 2-3 2-16 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13 13-14

exact bonds :

8-10 12-15 15-18

G1:Cb,Cy,Hy,Ak

Match level :

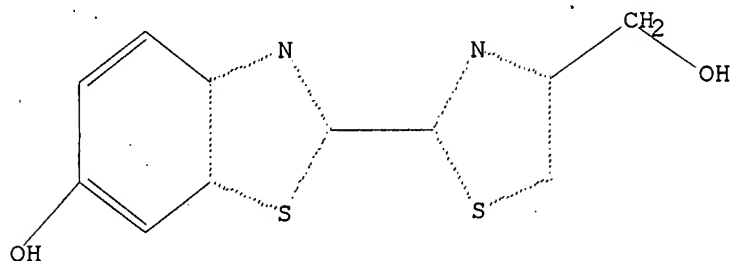
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 18:CLASS

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



G1 Cb,Cy,Hy,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 14:21:35 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 147 TO ITERATE

100.0% PROCESSED 147 ITERATIONS

1. ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 2213 TO 3667

PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 14:21:38 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 3249 TO ITERATE

100.0% PROCESSED 3249 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

L3 2 SEA SSS FUL L1

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

172.10

172.31

FILE 'CAPLUS' ENTERED AT 14:21:40 ON 05 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available

for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Oct 2007 VOL 147 ISS 16
FILE LAST UPDATED: 4 Oct 2007 (20071004/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l3

L4 5 L3

=> d ibib abs hitstr tot

ACCESSION NUMBER: 2006:1279865 CAPLUS
 DOCUMENT NUMBER: 146:57589
 TITLE: Luminogenic and fluorogenic compounds and methods to detect molecules or conditions
 INVENTOR(S): Daily, William; Hawkins, Erika; Klaubert, Dieter; Liu, Jianquan; Meisenheimer, Poncho; Scurria, Michael; Shultz, John W.; Unch, James; Wood, Keith V.; Zhou, Wenhui; Valley, Michael P.; Cali, James J.
 PATENT ASSIGNEE(S): Promega Corporation, USA
 SOURCE: PCT Int. Appl., 328pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006130551	A2	20061207	WO 2006-US20731	20060530
WO 2006130551	A8	20070201		
WO 2006130551	A3	20070503		

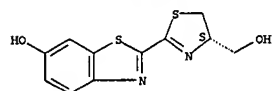
W: AE, AG, AL, AM, AT, AU, AZ, BA, BE, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

US 2007015790 A1 20070118 US 2006-444145 20060531
 PRIORITY APPLN. INFO.: US 2005-685957P P 20050531
 US 2005-693034P P 20050621
 US 2005-692925P P 20050622
 US 2006-790455P P 20060407

OTHER SOURCE(S): MARPAT 146:57589
 AB A method to detect the presence or amount of at least one mol. in a sample which employs a derivative of luciferin or a derivative of a fluorophore is provided.
 IT 676460-20-1
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (luminogenic and fluorogenic compds. and methods to detect mols. or conditions)
 RN 676460-20-1 CAPLUS
 CN 6-Benzothiazolol, 2-[(4S)-4,5-dihydro-4-(hydroxymethyl)-2-thiazolyl]- (CA INDEX NAME)

Absolute stereochemistry.



ACCESSION NUMBER: 2004:270174 CAPLUS
 DOCUMENT NUMBER: 140:299425
 TITLE: Luminescent cytochrome P 450 assay using luciferase, luciferin derivatives and pyrophosphatase, and drug screening applications
 INVENTOR(S): Cali, James J.; Klaubert, Dieter; Daily, William; Ho, Samuel Kin Sang; Frackman, Susan; Hawkins, Erika; Wood, Keith V.
 PATENT ASSIGNEE(S): Promega Corporation, USA
 SOURCE: PCT Int. Appl., 130 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004027378	A2	20040401	WO 2003-US29078	20030916
WO 2004027378	A3	20041125		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BE, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2497560 A1 20040401 CA 2003-2497560 20030916
 AU 2003267245 A1 20040408 AU 2003-267245 20030916
 AU 2003267245 B2 20070712
 EP 1546162 A2 20050629 EP 2003-749715 20030916

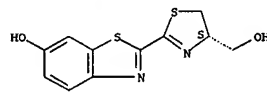
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

JP 20060508339 T 20060309 JP 2004-537859 20030916
 US 2004171099 A1 20040902 US 2003-665314 20030919
 PRIORITY APPLN. INFO.: US 2002-412254P P 20020920
 US 2003-483309P P 20030627
 WO 2003-US29078 W 20030916

OTHER SOURCE(S): MARPAT 140:299425
 AB The present invention provides methods, compns., substrates, and kits useful for analyzing the metabolic activity in cells, tissue, and animals and for screening test compds. for their effect on cytochrome P 450 activity. In particular, a one-step and two-step methods using luminogenic mols., e.g. luciferin or coelenterazines, that are cytochrome P 450 substrates and that are also bioluminescent enzyme, e.g., luciferase, pro-substrates are provided. Upon addition of the luciferin derivative or other luminogenic mol. into a P 450 reaction, the P 450 enzyme metabolizes the mol. into a bioluminescent enzyme substrate, e.g., luciferin and/or luciferin derivative metabolite, in a P 450 reaction. The resulting metabolite(s) serves as a substrate of the bioluminescent enzyme, e.g., luciferase, in a second light-generating reaction. Luminescent cytochrome P 450 assays with low background signals and high sensitivity are disclosed and isoform selectivity is demonstrated. The present invention also provides an improved method for performing luciferase reactions which employs added pyrophosphatase to remove inorg. pyrophosphate, a luciferase inhibitor which may be present in the reaction mixture as a contaminant or may be generated during the reaction. The

present method further provides a method for stabilizing and prolonging the luminescent signal in a luciferase-based assay using luciferase stabilizing agents such as reversible luciferase inhibitors.
 IT 676460-20-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of 2-cyanobenzothiazole derivs.; luminescent cytochrome P 450 assay using luciferase, luciferin derive. and pyrophosphatase, and drug screening applications)
 RN 676460-20-1 CAPLUS
 CN 6-Benzothiazolol, 2-[(4S)-4,5-dihydro-4-(hydroxymethyl)-2-thiazolyl]- (CA INDEX NAME)

Absolute stereochemistry.



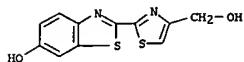
L4 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:76356 CAPLUS
DOCUMENT NUMBER: 128:99275
TITLE: Structure of the catalytic site of firefly luciferase and bioluminescence color
AUTHOR(S): Brovko, L. Yu.; Dementieva, E. I.; Ugarova, N. N.
CORPORATE SOURCE: Dep. Chem., Lomonosov Moscow State Univ., Moscow, 119899, Russia
SOURCE: Bioluminescence and Chemiluminescence: Molecular Reporting with Photons, Proceedings of the International Symposium on Bioluminescence and Chemiluminescence, 9th, Woods Hole, Mass., Oct. 4-8, 1996 (1997), Meeting Date 1996, 206-211. Editor(s): Hastings, J. W.; Kricka, L. J.; Stanley, P. E. Wiley: Chichester, UK.
CODEN: 65JYAO
DOCUMENT TYPE: Conference
LANGUAGE: English

AB Time-resolved fluorescence was used to examine the dynamic behavior of active site Trp in luciferase from Photinus pyralis and Luciola mingrelica. P. pyralis luciferase exhibited a more rigid protein structure consistent with its higher thermostability. Fluorescence spectra of luciferin (phenolate form) and dehydroluciferol in different organic solvents together with the spectral characteristics of native bioluminescence and protein structure were analyzed to establish a correlation between active site microenvironment and bioluminescence color. The authors conclude that bioluminescence color is determined by

both active site polarizability of the active site. The ability of nearby residues to rearrange around the emitter is also an important factor.

IT 43094-08-2, Dehydroluciferol
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(correlation of firefly luciferase active site flexibility and polarizability and bioluminescence color)
RN 43094-08-2 CAPLUS
CN 6-Benzothiazolol, 2-[4-(hydroxymethyl)-2-thiazolyl]- (9CI) (CA INDEX NAME)

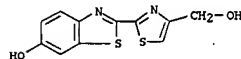


REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1979:519909 CAPLUS
DOCUMENT NUMBER: 91:119909
TITLE: Synthesis of firefly luciferin and structural analogs
AUTHOR(S): Bowie, Lemuel J.
CORPORATE SOURCE: Lab. Serv., VA Hosp., San Diego, CA, 92161, USA
SOURCE: Methods in Enzymology (1978), 57(Biolumin. Chemilumin.), 15-28
CODEN: MENZAU; ISSN: 0076-6879

DOCUMENT TYPE: Journal
LANGUAGE: English
AB The synthesis of luciferin and analogs is described using the synthetic approach of S. Seto et al. (1963) for mechanistic studies of firefly luciferase. The procedure involves the reaction of carbamoylthiocarbonylthioacetic acid with p-anisidine to form 4-methoxythiooxanilamide which is cyclized to form 2-carbamoyl-6-methoxybenzothiazole. This is converted to the corresponding nitrile, and this is condensed with cysteine.
IT 43094-08-2P
RL: PREP (Preparation)
(preparation of, for luciferase mechanistic studies)
RN 43094-08-2 CAPLUS
CN 6-Benzothiazolol, 2-[4-(hydroxymethyl)-2-thiazolyl]- (9CI) (CA INDEX NAME)

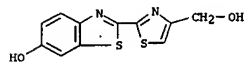


L4 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1973:401911 CAPLUS
DOCUMENT NUMBER: 79:1911
TITLE: Synthesis of a new substrate analog of firefly luciferin. Active-site probe
AUTHOR(S): Bowie, Lemuel J.; Horak, Vaclav; DeLuca, Marlene
CORPORATE SOURCE: Sch. Med., Georgetown Univ., Washington, DC, USA
SOURCE: Biochemistry (1973), 12(10), 1845-52
CODEN: BICHAW; ISSN: 0006-2960
DOCUMENT TYPE: Journal
LANGUAGE: English

GI For diagram(s), see printed CA Issue.
AB A new substrate analog of firefly luciferin was synthesized. The compound, 2-(6-hydroxy-2-benzothiazolyl)-4-hydroxymethylthiazole, (I) is an analog of dehydroluciferin, a competitive inhibitor of firefly luciferase. The spectral and enzymic properties of this analog suggest that it should be an ideal active-site for firefly luciferase.

IT 43094-08-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 43094-08-2 CAPLUS
CN 6-Benzothiazolol, 2-[4-(hydroxymethyl)-2-thiazolyl]- (9CI) (CA INDEX NAME)



=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

26.82

199.13

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-3.90

-3.90

FILE 'REGISTRY' ENTERED AT 14:21:58 ON 05 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4

DICTIONARY FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

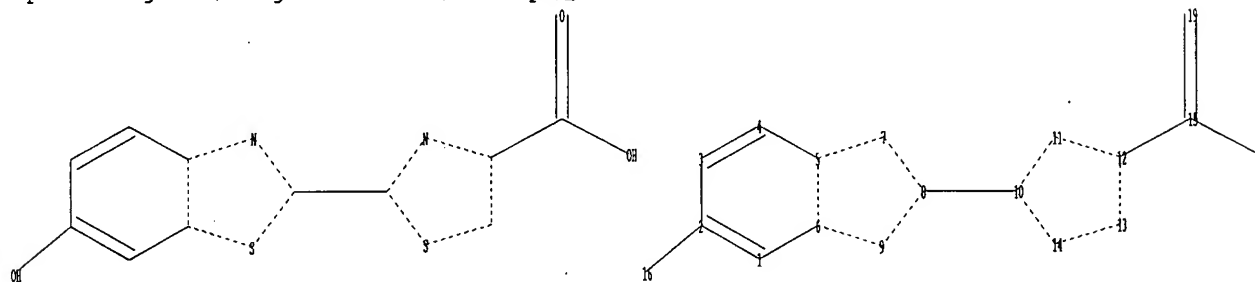
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10665314f.str



chain nodes :

15 16 18 19

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14

chain bonds :

2-16 8-10 12-15 15-18 15-19

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13 13-14

exact/norm bonds :

1-2 1-6 2-3 2-16 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13 13-14

exact bonds :
8-10 12-15
normalized bonds :
15-18 15-19

G1:Cb,Cy,Hy,Ak

Match level :

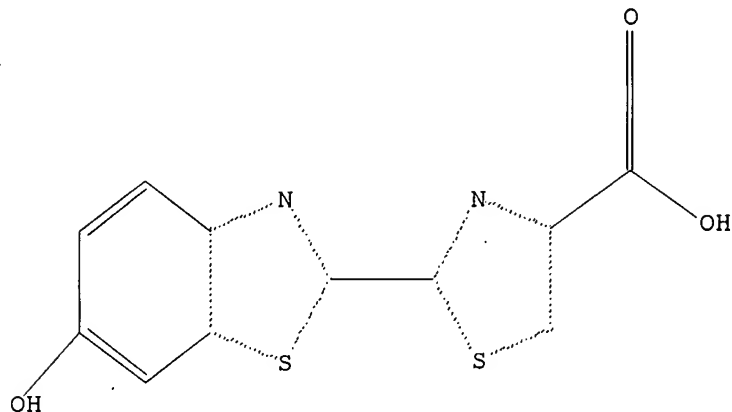
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 18:CLASS 19:CLASS

L5 STRUCTURE UPLOADED

=> d

L5 HAS NO ANSWERS

L5 STR



G1 Cb,Cy,Hy,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 15

SAMPLE SEARCH INITIATED 14:22:42 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 189 TO ITERATE

100.0% PROCESSED 189 ITERATIONS

5 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 2956 TO 4604

PROJECTED ANSWERS: 5 TO 234

L6 5 SEA SSS SAM L5

=> s 15 full

FULL SEARCH INITIATED 14:22:45 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 4492 TO ITERATE

100.0% PROCESSED 4492 ITERATIONS
SEARCH TIME: 00.00.01

33 ANSWERS

L7 .33 SEA SSS FUL L5

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

172.10

371.23

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-3.90

FILE 'CAPLUS' ENTERED AT 14:22:47 ON 05 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Oct 2007 VOL 147 ISS 16

FILE LAST UPDATED: 4 Oct 2007 (20071004/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s 17

L8 865 L7

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.47

371.70

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-3.90

FILE 'REGISTRY' ENTERED AT 14:23:13 ON 05 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4
DICTIONARY FILE UPDATES: 4 OCT 2007 HIGHEST RN 949197-90-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

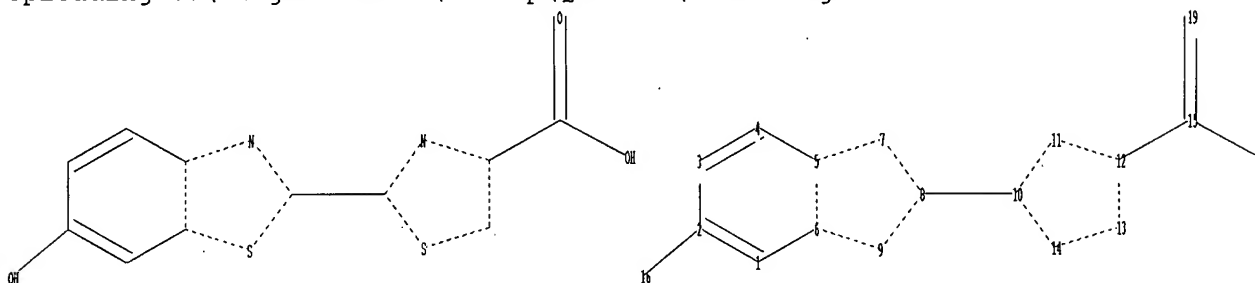
Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10665314g.str



chain nodes :

15 16 18 19

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14

chain bonds :

2-16 8-10 12-15 15-18 15-19

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13 13-14

exact/norm bonds :

2-16 5-6 5-7 6-9 7-8 8-9 10-11 10-14 11-12 12-13 13-14

exact bonds :

1-2 1-6 2-3 3-4 4-5 8-10 12-15

normalized bonds :

15-18 15-19

isolated ring systems :

containing 1 : 10 :

G1:Cb,Cy,Hy,Ak

Match level :

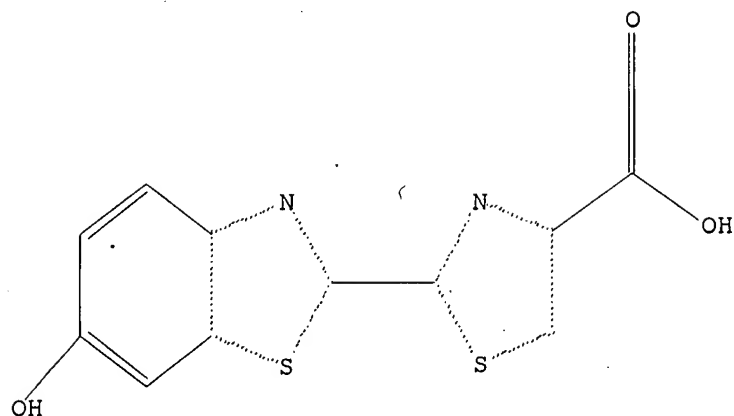
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 18:CLASS 19:CLASS

L9 STRUCTURE UPLOADED

=> d

L9 HAS NO ANSWERS

L9 STR



G1 Cb,Cy,Hy,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 19

SAMPLE SEARCH INITIATED 14:23:31 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 189 TO ITERATE

100.0% PROCESSED 189 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**

PROJECTED ITERATIONS: 2956 TO 4604

PROJECTED ANSWERS: 0 TO 0

L10 0 SEA SSS SAM L9

=> s 19 full

FULL SEARCH INITIATED 14:23:34 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 4492 TO ITERATE

100.0% PROCESSED 4492 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

L11 0 SEA SSS FUL L9

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

172.10

543.80

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-3.90

FILE 'CAPLUS' ENTERED AT 14:23:44 ON 05 OCT 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Oct 2007 VOL 147 ISS 16
FILE LAST UPDATED: 4 Oct 2007 (20071004/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l8 and luciferin
2841 LUCIFERIN
286 LUCIFERINS
2911 LUCIFERIN
(LUCIFERIN OR LUCIFERINS)
L12 823 L8 AND LUCIFERIN

=> log y		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	2.48	546.28
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-3.90

STN INTERNATIONAL LOGOFF AT 14:24:21 ON 05 OCT 2007